

during which a few *Peridromia saucia* (Hüb.), more *P. unionalis* and a single *M. loreyi* were also noted. Rain arrived not long after midnight and became increasingly heavy, forcing us to pack up about two hours later.

The numbers of scarcer migrant species noted during the night were as follows, with most being recorded before 21.00 hours; twelve *P. unionalis*, one *Mythimna albipuncta* (D. & S.), five *M. loreyi*, two *M. unipuncta* and two *Heliothis armigera*. It is also worth reporting the almost certain sighting of a single *Diachrysia orichalcea* (F.). This moth was seen by us both to settle, momentarily, on one of the traps before disappearing off into the darkness, not to return

I stayed in Sussex until the following evening, when Mark and I returned to the same locality for the dusk flight, and were accompanied by Colin Pratt. The sky was fairly clear, and a stronger wind made conditions cooler than the previous night; not surprisingly fewer moths were on the wing. Nonetheless, one *P. unionalis* and a further two *M. loreyi* were recorded, all before 19.15, at which time I had set off for the return trip to Norfolk. En route back we stopped for just a few minutes, on the Pevensey Levels, to search ivy blossom, and here one of only three moths seen was a worn male *M. unipuncta*.

Incidentally, I had visited the cliffs near Eastbourne earlier in the month, on the 5th October. On this occasion singletons of the following species were noted at mv light; *Agrius convolvuli* (L.), *Macroglossum stellatarum* (L.), *Mythimna l-album* (L.) and *M. unipuncta*.— A.P. FOSTER, 58 St Laurence Avenue, Brundall, Norwich NR13 5QN.

Further notes on *Phyllonorycter leucographella* (Zeller), (Lep.: Gracillariidae)

In my paper on this species (*Entomologist's Record* **101**: 189-194), I stated that according to Continental authors it was univoltine, though Hering thought a second generation to be likely. I can now report that it has three adult emergences, April-May, late July-August and October, the first, at any rate in Essex in 1989, being the largest.

I felt it appropriate to continue my research in Mrs Sargent's garden, since it was she who had brought attention to the presence of the species in Britain. I paid my first visit on the 21st June. All the leaves with winter mines had now fallen and Mrs Sargent reported that her pyracantha blossom had been the best she had ever witnessed. Larval feeding of *P. leucographella* was already present but wholly epidermal and not at all conspicuous.

My next visit was on the 19th July. The mines on the bushes facing east had made little progress, but those facing west, which were receiving extensive sunshine, were much further advanced. Many larvae had reached the parenchyma-feeding stage with the leaves folding upwards into the characteristic pods. I collected about 70 mines from which 14 imagines

emerged between the 23rd July and the 8th August; there were only six parasites of two species, now with Dr M.R. Shaw. The small number of emergences may have been due to my having collected the leaves too early.

My third visit was on the 30th September. The pyracantha berries were making a wonderful display and the heavy infestation had clearly done no lasting damage. The mines on the shadier side of the garden included relatively few that were fully formed and many contained dead larvae. On the sunnier side the situation was again different, with plenty of fully developed mines, though fewer than in March. I took 25 from which 12 adults and one parasite emerged between 13th and 28th October. Emergence was also taking place in the wild; R.J. Heckford captured an adult at Grays, Essex on 28th October (D.J.L. Agassiz, pers. comm.).

Although I have said that there are three broods, possibly there is only a single generation in shady situations. Against a sun-baked fence development is more rapid to produce the smaller second and third emergences. There may, however, be no clear demarcation between them.— A.M. EMMET, Labrey Cottage, Victoria Gardens, Saffron Walden, Essex CB11 3AF.

Dates of emergence of *Abraxas grossulariata* (Linnaeus) (Lep.: Geometridae) in South Cumbria

I was much interested in the recent note by Mr A.A. Allen (Allen, 1989) concerning the seasonal cycle of the Magpie moth (*Abraxas grossulariata*). His note stimulated me to review the records of this species covering a period of 68 years — 1918 - 1987 inclusive — which exist for this district of Cumbria (v.c. 69).

The late Dr R.C. Lowther, who was for many years in medical practice in Grange-over-Sands, kept very detailed records of all his captures and observations on the moths of Grange and its neighbourhood. In the three large volumes of records, which were given to me by Mrs Lowther after her husband's death, there is a page for each species of macrolepidopteron giving details of first annual dates of occurrence in Grange, Arnside, Kendal and other local areas. These records form the basis for the earlier years here considered and cover the period from 1918 to 1949 inclusive.

In 1969 Mr Jerry Briggs moved from Yorkshire and came to live in the very favoured locality of Beetham, near Milnthorpe, Cumbria. Here he operated a mv trap from 1969 until the present time. Records of his captures and observations were kept in very great detail. Unfortunately health problems put a stop to full recording in 1985. Recently his collection and note books have been donated to the Cliffe Castle Museum, Keighley where they are in the charge of Miss Margaret M. Hartley who kindly abstracted relevant records for inclusion in this paper. Between 1950 and 1969 full records of first dates are not available. A few records for this period are included in the data, these provided by the late Rev J. Vine-Hall (Vine-Hall, 1954) and the author.